#### "Shiver me timbers" - Or how to scribe the planks

The easiest way to turn balsa sheet into planked decking, is to scribe it with a pencil and ruler. Make sure that your pencil is sharp and start by doing the centre line along the deck. Pressing firmly, but not too hard, scribe a pencil line along the grain of the wood. Repeat this across the width of the deck, keeping the ruler parallel to the centre line. Once the deck has been glued in place, undercoat it a khaki colour. Make sure that the khaki colour goes down into all the crevices. Then paint the planks cream to represent scrubbed wood, leaving the recessed lines in the darker colour.

## Laying in the Stores

#### To get your figures afloat, you will need the following materials

X. 4mm thick balsa sheet for making the base and decks. It has to be 4mm or you will suffer a cumulative height error as the decks stack up.

Thin card. About twice the thickness of a cereal packet, this Thin card. About twice the unexities of a concert range of a concert r easily.

Mounting card or card of a similar thickness. You will not × need a great deal of this as it is only used for the stern; You may find that you can get cheap offcuts from a picture framer.

×. Balsa strip. Sizes between about 3 and 6mms are useful. This is used for ships' rails, steps and making window frames.

Piano or florist's wire. One piece to hold up the foresail.

×. Dowel for the masts. I used 8mm diameter for the lower masts, 6mm for the topmasts and 4mm for the yards. These sizes are not critical, but looked right in use. Hardwood dowel is stronger than balsa and is no more difficult to use.

1 Glue. I recommend a contact adhesive such as UHU for the card and balsa wood and quick-setting Araldite for yards and masts.

Dressmaking pins, Bluetack, Rubber bands - these are useful for holding things in place while glue dries.

# How to build a ship

Photocopy the two pages of templates. Cut them out using a craft knife or scalpel, using a ruler for the straight lines.

Lay the templates on the relevant card or balsa wood. It will say on the template sheet which material to use for each part. It also tells you how many you will need of each part. x 1 means you will need one part, x 2 means you will need to cut out two. Holding the templates firmly in place, you can pin them to the balsa sheet and tape them to card, draw round them as carefully as possible. I found that a fine felt -tip pen was best for this.

#### Some cutting remarks

When cutting out the pieces, use a scalpel or craftknife with a new blade. You should be able to cut through 4mm balsa sheet in one pass, but thick card will take several goes. It is much safer and produces a better result to cut something lightly lots of times, than to press like a maniac and attempt to do it all in one go; Always cut on a piece of old card, or a cutting mat. It makes your blades last longer, you get a cleaner cut, and your tabletop remains undamaged. Finally, unless you want to end up like Captain Hook, always cut away from the fingers holding the piece in place. If you find some of the curves you have cut are a bit bumpy and irregular, just rub the offending area lightly with a bit of fine sandpaper. This works just as well with card as with balsa.

Scribe the quarterdeck, the foredeck, the prow, and the centre of the maindeck to resemble planking if desired.

Using scrap balsa sheet, cut out six spacers to support the various balsa deck pieces. You will need five pieces 7.5 cms x 2 cms and one piece 7.5 cms x 3 cms.

Referring to diagram 1, glue the decks to the base, inserting the spacers, as shown, to support the decks at the correct heights. Work from the base upwards aligning the fronts of the base and the maindeck so that the back of the maindeck overhangs the back of the base by 1 cm. When the quarterdeck is glued in position, it should overhang the back of the maindeck by 1 cm. Stick the prow into position in front of the forecastle. Pin the joints temporarily to stop them moving while the glue dries.

Glue the stem into place so that it locks into the little notch in the prow.

Glue the stern into place aligning the bottom of the piece with the bottom back edge of the maindeck. When the glue has dried, glue the stern widows piece directly on top, aligning all the edges.

Bend the stern filler round a pencil or biro until it matches the curve directly below the stern windows, then glue it into position.

You can now glue the forecastle front and the forecastle back and the quarterdeck front into position. They should glue directly on the outside faces of the deck spacers which are already in place.

#### Before you get stuck in...

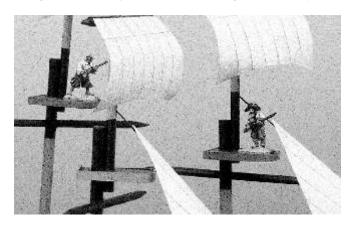
Before covering a piece of the ship in glue and trying to ram it into place, put it into position to see if it fits. Remember that however hard you have tried to be accurate, a perfect fit is going to be unlikely every time. Just check first and if the piece needs sanding a little, or a millimetre of card cutting off, then it's better to know before you're right up Frenchman's Creek.

Gently curve the hull sides between your fingers and glue one into position, with its bottom aligned with the base to ensure a clean join at the waterline. When the glue has dried, do the same with the other side.

Glue one of the prow decorations into place. The top curved bar should cover most of the side of the prow piece. For exact positioning look at the photographs. When the glue has set, position and glue the other to match. Apart from detailing, the hull is now complete.

## Hoist the Masts

Drill holes in the decks for the masts. Do this gently as it is very easy to chew away the soft balsa wood. Remember that the hole for the bowsprit should be angled so that when it is in position it nearly rests



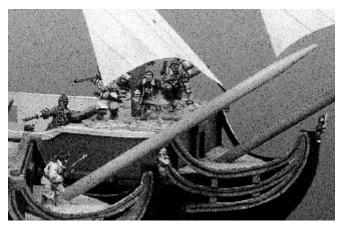


on the top of the stem. Do not drill through the bottom of the hull as the end of the mast should rest on and be glued to the base. Drill two holes in each top to accept the masts where they overlap in the middle. These holes should be towards the back of the tops, to allow plenty of room for figures. Have a look at the photograph of the top if this seems a bit unclear.

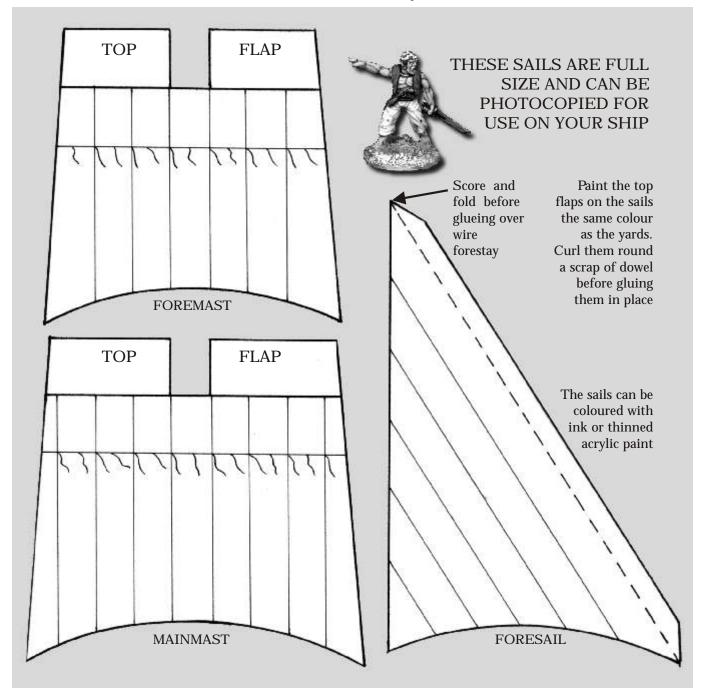
Cut the masts and yards from dowel. Shave and sand the ends of the yards and tops of the topmasts to sharp points. Using a piece of sandpaper wrapped round a pencil, rub a shallow rounded depression in the centre of each yard to ensure a good joint with the mast. The various mast sizes are listed below:

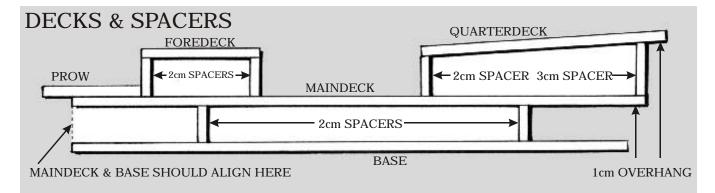
#### Mast Sizes

Foremast: Bottom-19cms. Top: 14 cms. Mainmast: Bottom-22cms. Top: 17 cms. Bowsprit: 21cms. Foremast upper yard: 9cms. Foremast lower yard: 13 cms. Mainmast upper yard: 11 cms. Foremast lower yard: 13cms.



Glue the lower masts and bowsprit in position in the holes in the deck and allow to set. Glue the topmasts to the lower masts, slipping the tops into position where the masts overlap. Have a good look at the photos before you do this. If the top does not hold the topmast sufficiently firmly, you can hold the two pieces together with rubber bands until the glue dries. The overlap on the mainmast is 6 cms, and the overlap on the foremast is 5 cms.





To position the yards, it is best to drill and pin the joints for strength. Using a fine drill, make a hole in the little depression in the centre of each yard. Araldite a small piece of wire about 5 mms long into each hole, with the ends projecting. Now drill a hole in each of the masts to accept these wire pins. On the lower fore and main masts, the yards will be positioned just below the overlap, so drill the holes 1cm below this point. Drill another hole 6.5 cms below the topmost point of the mainmast and another 4 cms below the topmost point of the foremast.

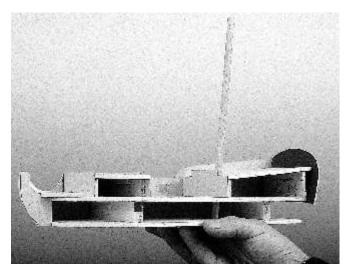
Araldite the yards into position, using the pins to locate the exact positions. Hold the yards in place with Bluetack while the glue sets. If you want to add sails to your model, you will need to position a wire between the bowsprit and the fore topmast to hold up the foresail. To do this drill a small hole in the bowsprit, 5cms from the tip. drill another 8.5 cms down from the topmost point of the upper foremast. Remember to angle the holes to accept the straight wire which should then be glued into place with Araldite.

The sails themselves should not be glued into position until the ship has been painted.

Your collection of balsa and card pieces is now a ship. Congratulations! If you have had enough, you can paint the whole thing dark brown and go away and enjoy a well-deserved game. If you want to add more detail, go ahead, using the models in the photographs or reference books as a guide. Remember to keep it simple and sturdy.

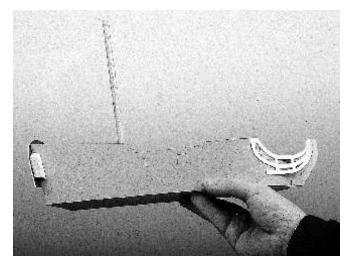
I would recommend lining the outside of the ship's rail with a strip of thin card about 2 or 3 cms wide. This strengthens the sides and gives the impression of a normal thickness hull.

To make a ship's boat, glue the ship's boat stern to its base. Glue the stem into the slot at the front of the base. When the glue has set, curve the side with your fingers and glue them into place. I added some thwarts to mine using strips of card, but this isn't strictly necessary.



A view of the brigantine's interior. I have pushed a mast section into position and you can see how its foot rests on the base of the ship. Before fixing on the stern, you may find it advisable to sand the back edge of the quarterdeck to an angle to produce a good fit.

They were glued directly to the ship's base to provide low-relief detail, which still allows figures to stand in the boat without interference.



This is a partially completed ship, showing the side with the bow ornament in place and before any detailing has been added. As the model is a little compressed, I have allowed for only two gunports a side.

## Touching up the "Gingerbread"

All that remains is to paint your ships. I used both enamel and acrylic paints on mine. Black paint was run into crevices and around any raised areas to make them stand out even more. The stern and any areas which would ultimately have gold scrolling were also painted black. You can refer to the photographs for other colours, or any of the readily available books on historic ships. A particularly useful book is one of The Seafarers series published by Time - Life Books . Its title is "The Pirates" by Douglas Botting, and, if you can't get hold of a copy, it is well-worth trying to find one through your local library.

I understand that Foundry are planning to produce

an enormous range of Napoleonic sailors and marines. As a lifelong fan of the Hornblower and Jack Aubrey novels I am beginning to be troubled by waking dreams that feature a cardboard Trafalgar. Virtually any type of sailing ship could be produced using this method. Give m e en o u g h cardboard and I could rule the world...